# Madagascar locust update for the 2<sup>nd</sup> dekad of May, 2011 with a forecast for the next dekad

## Meteorological and ecological conditions

During the second dekad of May, rains stopped and the soil was mostly dried or near drying in most of the outbreak areas and only a few pockets are still favorable and can sustain locust developments.

#### **Locust situation**

During this period, swarms were seen moving between the southern part of the country and the Horombe Plateau where 1<sup>st</sup> to 4<sup>th</sup> instar hoppers and bands were seen. A swarm that was believed to have followed the classical route of Taheza –Sakondry–Coasts of Lambosina pattern was detected in Marerano in the northwest zone. Low flying (5-15 meters) swarms coming from the south were reported in Vohitramboa, Ianambinda, Isoanala and Beraketa in the central zone south of the Horombe plateau. The swarms were light to dense transient or gregarious consisting mature and immature adults and measuring 40-1,000 ha (200 ha average). About 30% of the adults were fully mature (with 90% fully developed ovary) and some have started mating – a situation which could lead up to strong winter breeding. Natural predatory dipteran larvae that feed on eggs and hoppers were detected during this period (a good sign for slowing down population development).

Low density (500-2,000 insects/ha) medium size (about 50 ha) swarms were reported on Belomotra plateau passing through the Sakondry basin. Dense swarms and copulating adults (10-30 insects/m²) were observed in the surroundings of Manambien, between Tsivory and Tranomaro, in the south and southeast over 20,000 ha. Swarms were also seen flying out of the Karimbola plateau and on the coastal lowland in Androy. Medium to high density (50-150 insects/m²) gregarious 1<sup>st</sup> to 4<sup>th</sup> instar hopper bands with 2<sup>nd</sup> instar dominating were reported in areas measuring 500 m² to 15,000 m² at a distance of 200 ha to more than 1 km apart in low laying savanna.

# Impacts of the locust invasions on crops and pasture

Significant crop/pasture damage has not been reported during this period as most of the locusts were in their natural habitat where vegetation has been abundant due to heavy rains that began towards

end of December 2010 and continued well into early 2011. The ongoing control operations also contributed to the reduction of the risk of large numbers of locusts moving to cropping areas. A few hoppers that escaped into cropping areas adjacent to the natural habitat may have caused insignificant damage.

#### **Intervention actions**

During this dekad, 17,500 ha were protected against hoppers and bands using 7,000 l of Nomolt 50UL applied by air. Swarms were treated in 400 ha with 400 l of Imipest 10 UL (Imidaclopride). 40 kg of GreenMuscle (GM) (a fungal-based biopesticide) mixed with 800 liters of gasoline were used against 2<sup>nd</sup> instar hopper bands on 800 ha – a situation that created an opportunity for CNA staff and technicians to refresh their skills on the use and application of GM. As of May 20<sup>th</sup>, a cumulative total of 201,861 ha were treated and/or protected by air and ground means since the current campaign began on November 28, 2010. The two helicopters have so far logged in 718 hours and 43 minutes (32 hours and 57 minutes during this dekad).

## Current pesticide inventory and empty containers management

The CNA-FAO pesticide inventory stood at 1,200 l of Chlorpyrifos 240 ULV, 0.00 l of Nomolt 50 UL, 1,100 kg of GM, and 0.00 l of Imipest 10 UL (Imidachlopride) (note: the Betroka airbase received 3,000 l of Chlopyrifos 240 ULV, 1,200 l from Manja and Befandriana and 1,800 l from CNA; and 400 l of Imipest 10 UL from CNA during this dekad).

Six hundred and thirty four (634) two hundred-liter empty pesticide containers have been recovered and stored under the supervision of the zonal CNA agents and the central pesticide store manager in Tuléar.

#### Forecast:

As the vegetation continues drying up in the southwestern outbreak areas, escapee swarms will be moving north and northwest from June into September where they will likely threaten winter crops; a similar situation occurred in 2010. Unless the weather and ecological conditions deteriorate in the coming winter, it is unlikely that the locust numbers will decrease significantly without control operations. Unabated swarms could breed and infest the primary breeding areas following spring rains sometime in October/November – a situation which could lead to plague development.

Note: USAID through its Office of Foreign Disaster Assistance responded in time and generously to the appeal issued by the UN/FAO in support of the locust emergency campaign operations in Madagascar. Other donors made contributions and/or have pledged. End note.

#### Planned activities:

FAO deployed consultants to Tuléar and Betroka to continue survey and control operations and train CNA staff on the use and application of GM. Environmental monitoring activities are scheduled to commence in Belomotra and Mahafaly soon. As per the OFDA funded project, FAO, in collaboration with CNA will assess the impact of the locust invasions on crops and pasture. FAO will also carry out an evaluation on the quality and efficiency of control operations towards the end of the operations sometime in June (Source: Amadou KAMARA, FAOCNA, FAO, 5/25/2011).

#### Recommendations

Timely surveys, prepositioning supplies and materials and launching interventions on a timely manner are crucial to successfully abate and minimize any impending locust threats.

OFDA/TAG will continue closely monitoring the situation and issue updates and advice accordingly.

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